

1 1. A method comprising:
2 determining whether a supply voltage reaches a
3 predetermined level;
4 generating pulses to indicate that a supply
5 voltage is ramping up;
6 terminating the generation of said pulses after
7 said supply voltage reaches a predetermined level; and
8 preventing the pulses from being generated until
9 after the next power cycle.

1 2. The method of claim 1 including resetting said
2 logic to its predetermined initial state in response to
3 said pulse.

1 3. The method of claim 2 including indicating when
2 said supply voltage has reached its predetermined level and
3 providing a signal to a latch in response thereto.

1 4. The method of claim 3 including determining
2 whether said logic is in its predetermined initial state
3 and if so, providing a signal to said latch.

1 5. The method of claim 4 including stopping the
2 generation of a signal to reset said logic to its initial
3 state after said logic has provided a signal to said latch
4 indicating that the logic is in its predetermined initial

5 state and the supply voltage has reached its predetermined
6 level.

1 6. The method of claim 5 including preventing said
2 latch from thereafter changing state until the power supply
3 cycles again.

1 7. The method of claim 1 including determining when
2 the pulses are no longer generated.

1 8. The method of claim 7 including preventing the
2 generation of said pulses after the pulses are no longer
3 generated and prior to a power cycle.

1 9. The method of claim 1 including emulating logic
2 that is difficult to trigger and determining whether the
3 power supply voltage has reached a level sufficient to
4 trigger the difficult to trigger logic.

1 10. The method of claim 9 wherein determining whether
2 a supply voltage reaches a predetermined level includes
3 determining whether a voltage is above at least two
4 transistor threshold voltages.

Sub a

1 11. An integrated circuit comprising:
2 an activation circuit to determine whether a
3 supply voltage reaches a predetermined level;
4 a pulse generator to generate pulses to indicate
5 that a supply voltage is ramping up and to terminate the
6 generation of the pulses after the supply voltage reaches a
7 predetermined level; and
8 said activation circuit to prevent the pulses
9 from being generated again, after the generation of the
10 pulses has been terminated, until after the next power
11 cycle.

Sub b (cont'd)

1 ~~12.~~ ² The integrated circuit of claim ~~11~~ further
2 including a logic functionality to emulate logic that is
3 difficult to trigger and to determine whether the supply
4 voltage has reached a level sufficient to trigger the
5 difficult to trigger logic.

1 ~~13.~~ ³ The integrated circuit of claim ~~11~~ including a
2 level detector that detects when a voltage is above at
3 least two transistor threshold voltages, said level
4 detector operative to control said pulse generator.

1 ~~14.~~ The integrated circuit of claim ~~11~~ including a
2 feedback path that provides the output of said pulse
3 generator to said activation circuit.

1 15. The integrated circuit of claim 14 including an
2 inverter that creates a high signal in response to a low
3 signal on said feedback path.

Subj A
1 16. The integrated circuit of claim 15 including a
2 pair of transistors that must both conduct in order to
3 generate said pulses.

Subj B
1 17. The integrated circuit of claim 16 including a
2 capacitor circuit to enable the supply voltage to reach a
3 designated output level.

Subj C
1 18. The integrated circuit of claim 17 including a
2 hysteresis sense stage coupled to said capacitor circuit.

Subj D
1 19. The integrated circuit of claim 11 wherein said
2 activation circuit includes an inverter coupled to the gate
3 of a load transistor, a second transistor coupled to said
4 load transistor and a third transistor coupled between said
5 load transistor and said first transistor.

Subj E
1 20. The integrated circuit of claim 11 including a
2 circuit to latch the pulse generator in response to the
3 supply voltage being in a first state.

TOP SECRET - DEFENSE

1 21. A power-on reset pulse generator comprising:
2 a first circuit to develop a pulse indicating
3 that a power supply voltage is not in a first state; and
4 a second circuit coupled to said first circuit to
5 latch the first circuit in response to the power supply
6 voltage being in the first state..

1 22. The generator of claim 21 wherein said second
2 circuit latches the first circuit until the next power
3 cycle.

1 23. The generator of claim 21 including a logic
2 functionality that emulates logic that is difficult to
3 trigger.

1 24. The generator of claim 23 wherein said logic
2 functionality is coupled to the supply voltage.

1 25. The generator of claim 21 wherein said second
2 circuit includes a level detector that detects when a
3 voltage is above at least two transistor threshold
4 voltages, said level detector operative to control said
5 first circuit.

1 26. The generator of claim 21 including a feedback
2 path from the output of said first circuit to said second
3 circuit.

1 27. The generator of claim 26 including an inverter
2 coupled in said feedback path.

1 28. The generator of claim 27 including a pair of
2 transistors that must both conduct in order to generate
3 said pulse.

1 29. The generator of claim 28 including a capacitor
2 circuit to enable the supply voltage to reach a designated
3 output level.

1 30. The generator of claim 29 including a hysteresis
2 sense stage coupled to said capacitor circuit.

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